

State of Alaska FY2007 Governor's Operating Budget

Department of Environmental Conservation Water Results Delivery Unit Budget Summary

Water Results Delivery Unit

Contribution to Department's Mission

Protect water quality and assist communities in improving sanitation conditions.

Core Services

- Improve water quality conditions where they are below public health or environmental standards.
- Issue wastewater discharge permits to facilities and operations that release potentially harmful pollutants.
- Ensure facility compliance with permit conditions.
- Provide community assistance for the protection of water quality.
- Develop user friendly public access to water quality data.
- Provide grants, loans and engineering assistance for drinking water, sewerage, and solid waste facilities.
- Provide training programs for and certification of water and sewerage system operators.
- Provide over-the-shoulder and emergency assistance to system operators in remote communities.

End Results	Strategies to Achieve Results
A: Water quality is protected. <u>Target #1:</u> No polluted waters. <u>Measure #1:</u> Number of polluted waters.	A1: Establish protective standards for water quality. <u>Target #1:</u> Protective standards are established for Water Quality are complete by June 30, 2007. <u>Measure #1:</u> % of revisions to targeted standards for Water Quality are complete by June 30, 2007. <u>Target #2:</u> Submit a complete NPDES Primacy application to EPA by June 30, 2006. <u>Measure #2:</u> of the NPDES Primacy application completed by June 30, 2006. A2: Improve information management system. <u>Target #1:</u> ACWA database is completed by June 30, 2005. <u>Measure #1:</u> % complete by June 30, 2005. A3: Restore polluted waterbodies to their designated uses. <u>Target #1:</u> Two waterbody recovery plans per year. <u>Measure #1:</u> Number of polluted waterbody recovery plans completed during the year. <u>Target #2:</u> Ten active restoration projects per year. <u>Measure #2:</u> Number of active restoration projects during the year. A4: Issue discharge permits/authorizations. <u>Target #1:</u> 100% of known dischargers have current permits/authorizations.

	<p><u>Measure #1:</u> % of known dischargers have current permits/authorizations.</p> <p>A5: Enforce compliance with permit/authorization conditions.</p> <p>Target #1: Permit holders are compliant with permit/authorization terms and conditions.</p> <p><u>Measure #1:</u> % of permit holders requiring enforcement actions.</p>
End Results	Strategies to Achieve Results
<p>B: Citizens are protected from unsafe sanitation facilities.</p> <p>Target #1: 100% of homes in rural Alaska are served by safe, sustainable sanitation facilities.</p> <p><u>Measure #1:</u> % of homes in rural Alaska are served by safe, sustainable sanitation facilities.</p>	

Major Activities to Advance Strategies

- Identify Best Management Practices (BMP's) addressing all types of non-point source pollution.
- Ensure water quality standards to protect all uses of Alaska's fresh and marine waters.
- Implement the water monitoring strategy.
- Enforce the State's wastewater discharge standards through the review of cruise vessel monitoring reports and conduct independent DEC sampling.
- Conduct inspections and follow up with facility operators to correct noncompliance or take enforcement actions.
- Administer grants and loans.
- Provide engineering and technical assistance to communities.
- Train water and wastewater facility operators.

FY2007 Resources Allocated to Achieve Results

FY2007 Results Delivery Unit Budget: \$17,322,500

Personnel:

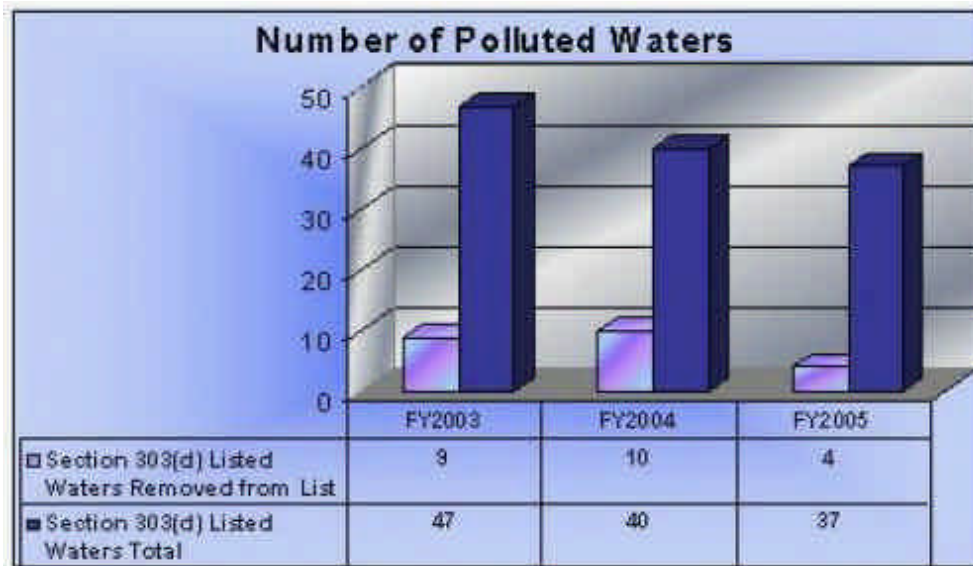
Full time	114
Part time	0
Total	114

Performance Measure Detail

A: Result - Water quality is protected.

Target #1: No polluted waters.

Measure #1: Number of polluted waters.



Analysis of results and challenges: Water Quality Standards, found in 18 AAC, designate specific uses for which water quality must be protected (e.g., drinking water, aquatic life) and specifies the pollutant limits, or criteria necessary to protect designated uses. There are seven designated uses for freshwater and seven for marine waters. By default, waterbodies in Alaska are protected for all designated uses. The few waterbodies that have had some uses removed are listed in the water quality standards.

The Department of Environmental Conservation (DEC) uses Water Quality Standards as the criteria to determine if a waterbody is polluted. For example, if waterbody monitoring data consistently shows high concentrations of a substance that is not suitable for aquatic life then that waterbody is considered polluted (or impaired) for that designated use. Alaska formally reports the status and trends of its waters every two years in the Integrated Water Quality Monitoring and Assessment Report. The report includes information on the general health of Alaska's waters, DEC water protection programs and a list of impaired waterbodies, and how the impairment is being addressed or proposed to be addressed. Waterbodies are placed in one of five categories based upon known information. The report meets Alaska's responsibilities under Section 303(d) of the Clean Water Act to identify polluted waters.

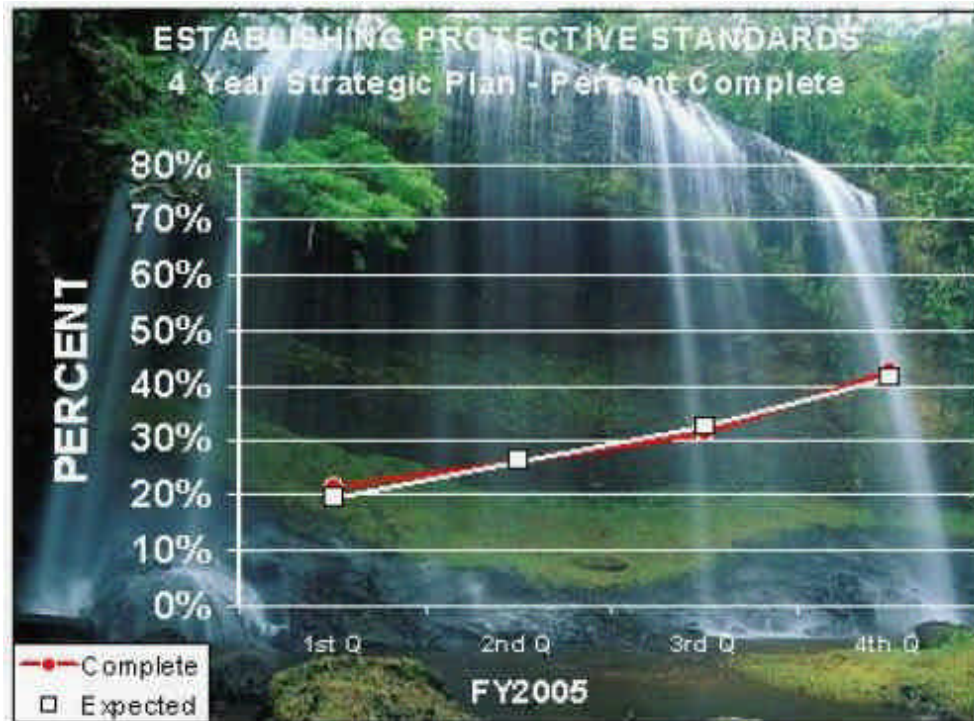
As of the end of FY2005, there are 37 waterbodies listed in Category 5 - Impaired and Requiring a Total Maximum Daily Load (TMDL), which is essentially a waterbody corrective action plan. The waterbodies are scheduled for development of a TMDL over a seven year period. Once a TMDL has been developed, an impaired water is moved into Category 4, which lists those waters which are impaired but for which a TMDL or other recovery plan is in place. In FY2005, 4 TMDLs were completed.

Further information may be found at http://www.state.ak.us/dec/water/wqsar/waterbody/waterbody_index.htm.

A1: Strategy - Establish protective standards for water quality.

Target #1: Protective standards for Water Quality are complete by June 30, 2007.

Measure #1: % of revisions to targeted standards for Water Quality are complete by June 30, 2007.



Analysis of results and challenges: Every three years, the Department of Environmental Conservation (DEC) conducts a comprehensive review of the Water Quality Standards in 18 AAC 70. Water Quality Standards are used to determine wastewater permit discharge requirements and whether a marine or freshwater waterbody is suitable for designated uses. This Triennial Review is a federal Clean Water Act requirement that helps set pollution limits for Alaska's waters by integrating the most current science and technology. DEC focuses its efforts on updating or developing standards so that they are relevant to Alaska's conditions and needs.

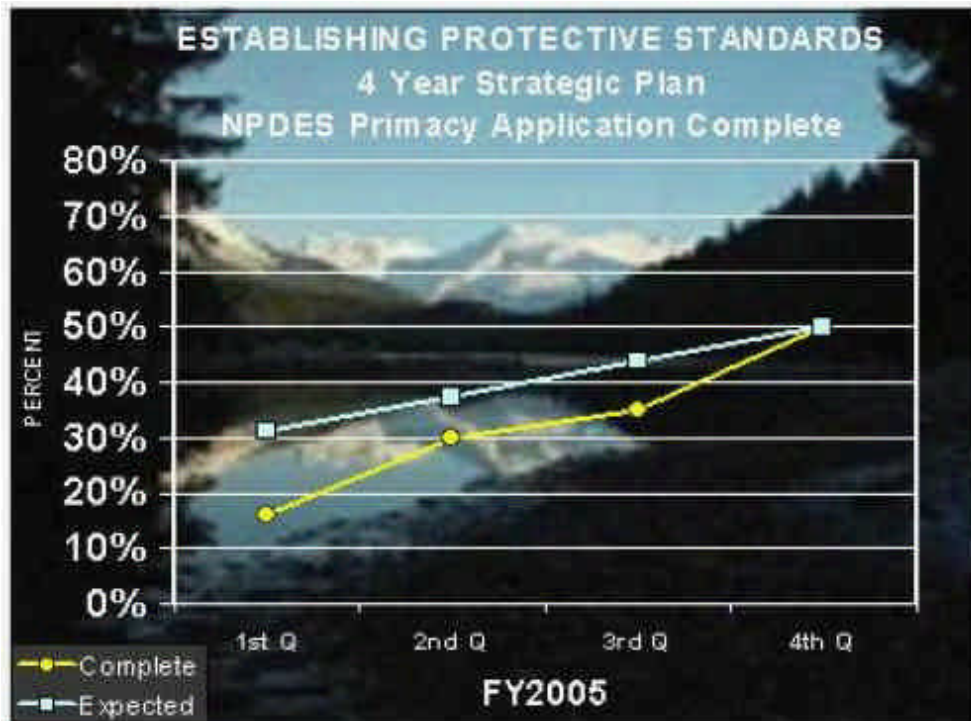
DEC is taking action on the following standards during the Triennial Review (percent of completion in parenthesis): Mixing Zone Regulations (75%), Residue Criteria (70%), Petroleum Hydrocarbons Criteria (100%), Bacteria Criteria (25%), Natural Conditions Site Specific Criteria Guidance (30%), Groundwater Standards (10%), Antidegradation Policy Implementation (30%), Dissolved Inorganic Substances Criteria (0%) and Arsenic Drinking Water Criteria (0%).

The division will be extending the project's completion date into FY2007 to allow for public comment period extensions and a new public notice for mixing zone regulations; Natural Conditions project re-scoping; the necessity to develop a new process for consultations with Federal agencies on Essential Fish Habitat and the Endangered Species Act; and extensive coordination with State resource agencies.

Further information on the Triennial Review may be found at:
<http://www.state.ak.us/dec/water/wqsar/trireview/trireview.htm>.

Target #2: Submit a complete NPDES Primacy application to EPA by June 30, 2006.

Measure #2: of the NPDES Primacy application completed by June 30, 2006.



Analysis of results and challenges: Section 402 of the Clean Water Act (CWA) requires that all discharges to surface waters be permitted under the National Pollutant Discharge Elimination System (NPDES) permit program. The CWA intends for states to implement (to have "primacy" for) the NPDES program with the Environmental Protection Agency (EPA) acting in an oversight role. EPA is currently the NPDES authority in Alaska. DEC plays a secondary role certifying that EPA permits meet state water quality standards and issuing state permits for small discharges that EPA cannot get to.

On August 27, 2005 the Governor signed Senate Bill 110, which directs DEC to seek and assume primacy for the NPDES wastewater permit program. DEC will submit a primacy application to EPA for their approval before July 1, 2006. That application will include:

1. A letter from the Governor requesting approval of the state's application;
2. A Program Description that describes how the state will issue permits, ensure permit compliance, perform enforcement, fund the program, track issued permits and enforcement actions, and submit periodic reports to EPA;
3. A signed Memorandum of Agreement (MOA) between the state and EPA that establishes timeframes for the state to assume authority for the program components over a five-year period;
4. An Attorney General statement of legal authority that confirms the state's laws and regulations are sufficient to implement the NPDES program; and
5. Statutes and Regulations.

A Continuing Planning Process document that discusses how the Department implements revised Water Quality Standards, determines permit issuance priority, and ranks waste treatment works construction.

A2: Strategy - Improve information management system.

Target #1: ACWA database is completed by June 30, 2005.

Measure #1: % complete by June 30, 2005.



Analysis of results and challenges: The Department of Environmental Conservation along with the Departments of Fish and Game and Natural Resources are responsible for implementing the Alaska Clean Waters Action (ACWA) policy. ACWA provides the framework to focus state and federal resources on the waters of greatest need, addressing issues of water quality, water quantity, and aquatic habitat. Background information on ACWA may be found online at http://www.state.ak.us/dec/water/acwa/acwa_index.htm.

The ACWA agencies have developed a waterbody nomination and ranking process that prioritizes assessment, stewardship, and corrective action needs for waters at risk of pollution and polluted waters, according to established criteria. The ACWA database is being developed to serve as a water information management system to track waterbody status, needs, and actions and facilitate the ranking process. Waterbody information will be available to help support environmental and natural resource decisions in Alaska.

The ACWA database was developed in four phases. Completion data represents work completed for database development and progress in gathering and evaluating data for the waterbodies. This includes percent of the water quality data collected, reviewed, and evaluated for 356 waterbodies.

The primary challenge rests in locating, collecting, and evaluating historical waterbody data located in the various resource agency offices. The project was completed by the end of FY2005 with more rigorous testing, data migration, data validation and report enhancements planned in FY2006.

A3: Strategy - Restore polluted waterbodies to their designated uses.

Target #1: Two waterbody recovery plans per year.

Measure #1: Number of polluted waterbody recovery plans completed during the year.



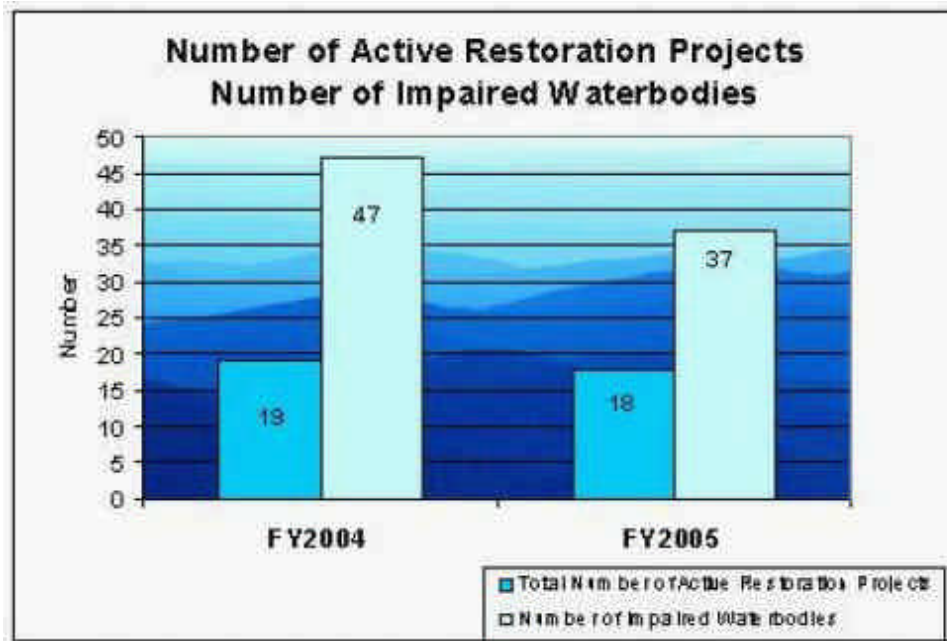
Analysis of results and challenges: When waterbodies are determined to be impaired (when they exceed Water Quality Standards for a particular pollutant), they are added to the Clean Water Act Section 303(d) list of impaired waterbodies submitted to the Environmental Protection Agency (EPA) every two years. It is incumbent upon the State and EPA to work to restore waterbodies. Restoration is accomplished through the development and implementation of either a Total Maximum Daily Load (TMDL) document, a Waterbody Recovery Plan, or through the implementation of permits or other controls. These plans or permits identify the source of the pollutant and the amount of pollutants that can be introduced to the waterbody while still allowing overall recovery to proceed. With this knowledge, parties who discharge pollutants are given an "allowance," or "total maximum daily load" for that pollutant, and/or prescriptive actions called Best Management Practices (BMPs) that they must follow, to stay within that allowance.

The first step toward the recovery of an impaired waterbody is the development of the TMDL or Waterbody Recovery Plan. The EPA is required, by court order, to complete at least two of these documents in Alaska, each year. TMDLs and Waterbody Recovery Plans developed by DEC, either directly through staff work or indirectly through contract or grant efforts, are approved by EPA and can be applied to this legal requirement. EPA may also initiate work on TMDLs or Waterbody Recovery Plans directly, with their staff or contracted efforts.

DEC strongly supports the development and implementation of these plans and has committed to completing a minimum of two per year. In FY2003, two were completed; in FY2004, six were completed; in FY2005 four were completed. Implementation is proceeding on all.

Target #2: Ten active restoration projects per year.

Measure #2: Number of active restoration projects during the year.



Analysis of results and challenges: Polluted, or "impaired" waterbodies are identified in the biennial "Integrated Report" submitted by DEC to the Environmental Protection Agency. The target for restoration of these waterbodies is at least 10 active restoration projects per year.

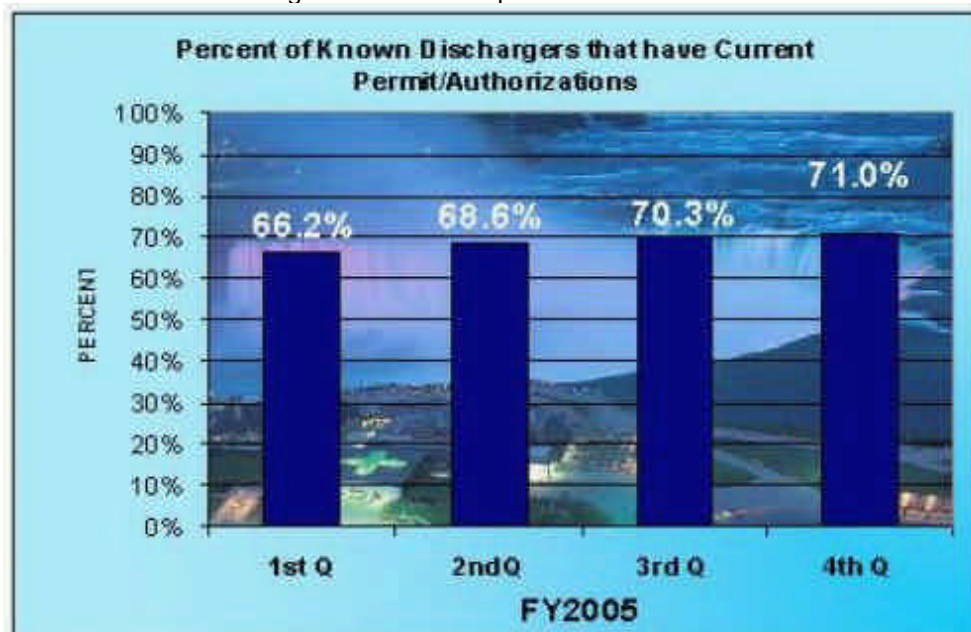
Restoration projects may be conducted by grantees who have received funds through the Alaska's Clean Water Actions (ACWA) grant program, by contractors, by other State agencies, or by DEC personnel.

This is a new measure. Reporting began during the 3rd quarter of FY2004. Data will be reported annually at the end of each fiscal year. At the end of FY2005, restoration projects were ongoing on 18 impaired waters.

A4: Strategy - Issue discharge permits/authorizations.

Target #1: 100% of known dischargers have current permits/authorizations.

Measure #1: % of known dischargers have current permits/authorizations.



Analysis of results and challenges: Two elements of the Non-Point Source Program, log transfer facilities and stormwater, and wastewater discharge facilities contribute data for this strategy.

Log Transfer Facilities

Log Transfer Facilities (LTFs) are issued either a State "authorization" for activity covered under a federal (EPA) General Permit, or a State Individual Permit (for which the applicant must also seek EPA permit coverage). At the end of the 1st quarter FY2005, there were 92 known dischargers (active LTFs, or LTFs desiring to remain actively permitted). By the end of the 4th quarter, 90 facilities had been issued authorizations for the EPA General Permit or had been issued a State Individual Permit. The LTF General Permits expired in the third quarter so applicants who failed to provide missing information are not eligible for permit coverage. None of these applicants had facilities that had actually transferred timber in FY2005.

Stormwater

The Department is engaged in three types of stormwater permit activities: 1) authorizations under the EPA's Construction General Permit (CGP) covering erosion and sediment control during construction activities; 2) engineering plan reviews for new buildings to ensure that stormwater is adequately addressed in permanent facility plans; and 3) authorizations of the EPA's Multi-Sector General Permit (MSGP) addressing various industrial sectors and activities common to their business processes and practices to prevent polluted runoff.

Reporting on stormwater-related activities is a challenge in that we do not have perfect knowledge of the activities taking place within the state. Professional contractors are conscientious - submitting engineering plans, preparing stormwater pollution prevention plans, and complying with EPA permitting requirements. However, we do not know how many construction activities or businesses may be operating outside of the EPA's permitting scheme. At this time, compliance with EPA stormwater permitting remains an EPA responsibility. Assumption of primacy for stormwater permitting will allow greater application of State resources, resulting in more complete knowledge of activities that should be reviewed and permitted.

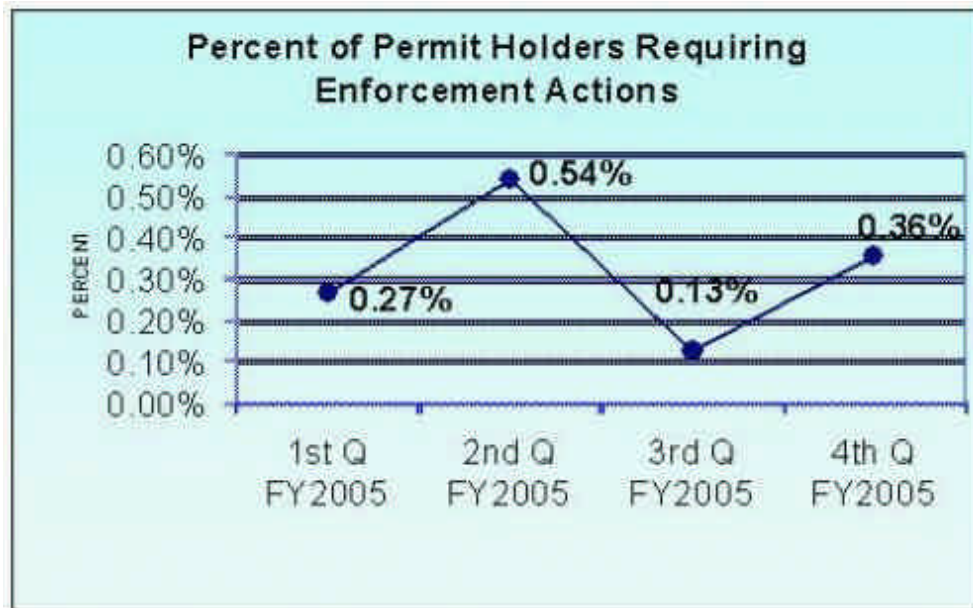
Wastewater Discharge Facilities

Wastewater dischargers which are required to have a permit fall into two general categories: domestic (municipal and private waste treatment plants) and industrial (including mining, oil & gas, seafood processing/hatcheries, utilities and transportation). The Environmental Protection Agency (EPA) focuses its efforts primarily on "major" dischargers in Alaska (i.e., industrial or domestic facilities with greater than one million gals per day discharge), whereas minor dischargers receive less attention. Beginning in 2001, the Department expanded state wastewater permitting efforts (about 150 permits/year, on average) and also worked with EPA to address the backlog of facilities that do not have current permits. The total number of wastewater facilities fluctuates from quarter to quarter for two primary reasons: 1) permits for short duration activities (one year or less) continually expire as work is completed and new activities are permitted and 2) additional minor dischargers with long-expired permits or unpermitted are discovered as DEC staff conduct inspections around the state. During FY2005, the number and percentage of facilities with current permits gradually increased. At year end, about two-thirds of known wastewater dischargers, had current permits, including the major dischargers. The remaining one-third are minor dischargers and many have permit applications in progress.

A5: Strategy - Enforce compliance with permit/authorization conditions.

Target #1: Permit holders are compliant with permit/authorization terms and conditions.

Measure #1: % of permit holders requiring enforcement actions.



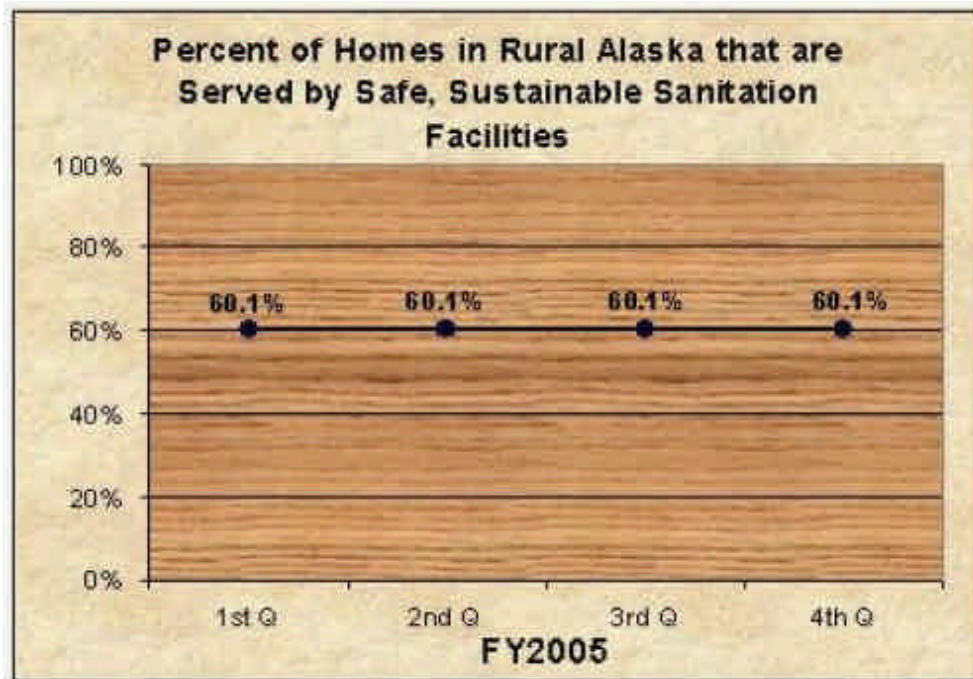
Analysis of results and challenges: Log Transfer Facilities: The owners/operators of Log Transfer Facilities may be covered under an EPA General Permit or a State Individual Permit. EPA is the enforcing authority of the conditions of a General Permit. DEC is the enforcing authority for State Individual Permits. For Individual Permits, strict parameters addressing the amount of bark that may be deposited into the waters and onto the bottom of waterbodies are identified as well as methodologies for determining those amounts. Periodic reports on the actions owners/operators take to implement requirements must be submitted. If the reports are found to be lacking, enforcement action is taken.

Waste Water Discharges: During FY2005, the program initiated administrative actions on several instances where regulated facilities (including domestic wastewater treatment plants and cruise ships) were known or suspected to not be in compliance with state requirements. Typically, staff seek additional information regarding an alleged violation and/or issue notices of violation to obtain the owner's attention and corrective action. Of the approximately 1000 known wastewater facilities, staff performed 128 on-site inspections in FY2005. Typically, minor compliance issues are identified for the owner/operator for resolution at the time of inspection without formal enforcement actions. In addition to actions reported on permitted facilities, in FY2005 staff issued 19 warning letters seeking corrective action to owners of failing or incomplete onsite septic systems, based on inspections and complaints.

B: Result - Citizens are protected from unsafe sanitation facilities.

Target #1: 100% of homes in rural Alaska are served by safe, sustainable sanitation facilities.

Measure #1: % of homes in rural Alaska are served by safe, sustainable sanitation facilities.



Analysis of results and challenges: The Facilities Component of the Division of Water (including the Village Safe Water Program, the RMW Program, and the Operations Assistance Programs) is working collaboratively with the State Rural Utility Business Advisor (RUBA) Program and the Alaska Native Tribal Health Consortium (ANTHC) to develop a common set of definitions for this measure. ANTHC is a partner agency in the administration of sanitation facility development and maintenance for rural Alaskan communities.

For FY2005, this measure was used for reporting progress. For FY2006, the measure is being redefined to make progress reporting more specific and understandable.

Key RDU Challenges

Many sources of water pollution are effectively regulated and controlled through permits. The largest remaining source of water pollution is from non-point sources that are not controlled through permits. This offers the challenge of affecting positive human behavior changes through education, land use controls, and best management practices so that water quality is maintained or restored.

The department is continuing the 'Raindrops to Ocean' review of its water quality programs for the purpose of establishing rational and seamless protective measures for all of Alaska's surface and groundwater. The review critically assesses the structure of DEC water programs and the use of permitting, field inspections, enforcement, and best management practices to assure that pollution risks are appropriately and efficiently mitigated from the time a raindrop falls upon the ground, moves from surface runoff into a stream, and until that raindrop is finally transported to the coast and the ocean.

As an outgrowth of this review, the 2005 Legislature authorized DEC to seek and assume primacy for the federal wastewater discharges permitting program, National Pollutant Discharge Elimination System (NPDES).

The department is updating its regulations to provide integrated permitting of large projects, such as hard rock mining, that require multiple reviews and approvals from DEC. The project will build a coherent set of regulations establishing the procedures and requirements for large projects to create a rational regulatory scheme.

Scientific review and adoption of new or revised water quality standards will continue through FY2007 to ensure they remain protective of the many uses of Alaska Waters.

Significant Changes in Results to be Delivered in FY2007

NPDES Primacy - First year (FY2006) program costs for implementation of the of the fiscal note for SB110, NPDES Primacy, were less than the second year (FY2007) costs will be as program activities ramp up. SB110's fiscal note reflected this in the first year, containing funding for only 1/2 year of staff and program cost. A transaction in this budget continues implementation of the fiscal note by adding the balance of funding necessary to obtain and implement a full primacy program in the second year. NPDES primacy supports and enhances the department's end result for protection of the environment through state regulated protection of water quality.

Remote Maintenance Worker (RMW) grants have not been increased for several years, while fuel and other expenses continue to rise. Federal funding is available to offset these increasing costs, but require a 25% state match. A requested budget transaction will allow RMW grantees and the Department to continue to provide the current level of service to communities. Without it, services will need to be reduced to counteract increasing costs.

Major RDU Accomplishments in 2005

WASTEWATER PROGRAM

- Issued 146 individual or general wastewater discharge permits and general permit authorizations and inspected 128 facilities with compliance sampling conducted at 29 (23%) of the facilities.
- Issued a general permit for underground disposal in Class I injection wells for North Slope oil and gas operations.
- Authorized 22 small domestic wastewater treatment facilities statewide under up-to-date general permits that replaced outdated or expired permits for wastewater discharges to marine and freshwater across Alaska.
- Improved field and compliance/technical assistance to permittees, improved the timeliness of staff inspection reports to inspected facilities within 45 days, and continued to train staff on permitting and enforcement skills and specialized environmental sciences.
- Completed an inventory of 130 rural wastewater treatment lagoons as part of a multi-year project to evaluate the performance of selected, representative rural lagoons and to provide design and operational recommendations.
- Registered 47 commercial passenger vessels for operation in Alaska's waters and inspected 19 vessels in 2005.
- Maintained an internet-based clearinghouse for annual cruise ship registration materials and forms, program guidance, reports, law and regulations.
- Undertook 29 actions (warning letters and notices of violation) to follow up on noncompliance issues addressing wastewater treatment facilities (4), on-site septic systems (18), and commercial passenger vessels (7).

NON POINT SOURCE PROGRAM

- Reviewed 148 stormwater pollution prevention plans ensuring protection of surface water bodies during facility construction and operation; reviewed 55 facility engineering plans for compliance with stormwater requirements; issued 10 approvals for EPA Multisector General (MSGP) permits; issued 143 water quality certifications of U.S. Army Corps of Engineers permits for dredge and fill projects.
- Issued 2 water quality certifications of EPA Phase II Municipal Stormwater (MS4) permits in the Fairbanks area.
- Issued 1 individual log transfer facility (LTF) wastewater discharge permit, 6 LTF general permit authorizations and 1 authorization modification; approved one remediation plan for LTF facility.
- Reviewed 38 detailed operation plans for forestry activities on private lands.
- Completed 4 TMDLs (Total Maximum Daily Load plans; also known as waterbody recovery plans) Chester Creek, University Lake, and Westchester Lagoon in Anchorage; Jordan Creek in Juneau.

WATER QUALITY ASSESMENT AND MONITORING PROGRAM

- Developed Online Permit Application system, with electronic signature and electronic payment capabilities.
- Developed a shared resource agency (DEC, DFG & DNR) online waterbody nomination and ranking system to help target limited resources towards the State's highest waterbody priorities.
- Prepared a draft Water Education Strategy for advancing improvements to water quality.
- Developed a Water Quality Monitoring and Assessment Strategy for determining the health of Alaska's water resources.
- Proposed a restructuring and changes to mixing zone regulations in the Water Quality Standards.
- Negotiated a coordinated review process and technical workgroup with EPA, USFWS and NMFS for Endangered Species Act and Essential Fish Habitat consultations on revisions to Water Quality Standards.
- Recommended retention of current water quality criteria for petroleum hydrocarbons based on a scientific literature review of the effects of petroleum hydrocarbons on Alaskan aquatic species.

- Completed Southeast Alaska Environmental Monitoring & Assessment Program (EMAP) survey for water quality, sediment contamination and biological status of inland waters.
- Completed Southcentral coastal waters EMAP analysis for water quality, sediment contamination and biological status.

VILLAGE SAFE WATER PROGRAM

- Secured \$59.5 million in federal Environmental Protection Agency and US Department of Agriculture-Rural Development grant funding for the program.
- Awarded \$74.3 million in grants for 51 water, wastewater and solid waste projects.

Contact Information

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Water
RDU Financial Summary by Component

All dollars shown in thousands

	FY2005 Actuals				FY2006 Management Plan				FY2007 Governor			
	General Funds	Federal Funds	Other Funds	Total Funds	General Funds	Federal Funds	Other Funds	Total Funds	General Funds	Federal Funds	Other Funds	Total Funds
<u>Formula</u>												
<u>Expenditures</u>												
None.												
<u>Non-Formula</u>												
<u>Expenditures</u>												
Water Quality	3,552.9	3,998.5	875.4	8,426.8	4,671.5	4,745.5	992.0	10,409.0	5,502.4	4,625.9	888.9	11,017.2
Facility	954.8	1,458.7	2,884.1	5,297.6	939.2	1,640.2	3,435.4	6,014.8	984.0	2,452.1	2,869.2	6,305.3
Construction												
Totals	4,507.7	5,457.2	3,759.5	13,724.4	5,610.7	6,385.7	4,427.4	16,423.8	6,486.4	7,078.0	3,758.1	17,322.5

Water
Summary of RDU Budget Changes by Component
From FY2006 Management Plan to FY2007 Governor

All dollars shown in thousands

	<u>General Funds</u>	<u>Federal Funds</u>	<u>Other Funds</u>	<u>Total Funds</u>
FY2006 Management Plan	5,610.7	6,385.7	4,427.4	16,423.8
Adjustments which will continue current level of service:				
-Water Quality	178.5	110.7	21.3	310.5
-Facility Construction	14.2	720.2	-570.8	163.6
Proposed budget decreases:				
-Water Quality	-28.9	-235.0	-125.3	-389.2
Proposed budget increases:				
-Water Quality	681.3	4.7	0.9	686.9
-Facility Construction	30.6	91.7	4.6	126.9
FY2007 Governor	6,486.4	7,078.0	3,758.1	17,322.5